

b) Amendments to the Claims

Kindly amend claims 1 and 3 and add new claims 44 and 45 as follows. A detailed listing of all the claims that are or were in the application follows:

1. (Currently Amended) A magnetic recording medium, in which ~~an aluminum-oxide~~ a mainly aluminum layer having holes on a substrate is filled with a magnetic substance, comprising:

at least one conductive layer between the ~~aluminum-oxide~~ mainly aluminum layer and the substrate,

wherein the magnetic substance contacts the conductive layer and the magnetic substance includes a hard magnetic substance that has hcp structure and the c-axes of which are oriented in a direction perpendicular to the substrate.

2. (Original) The magnetic recording medium according to claim 1, wherein the hard magnetic substance includes Co.

3. (Currently Amended) The magnetic recording medium according to claim 1, wherein the mainly aluminum layer ~~aluminum-oxide~~ has nanoholes formed by anodic oxidization.

4. (Original) The magnetic recording medium according to claim 1, wherein the conductive layer is a base electrode layer.

5. (Original) The magnetic recording medium according to claim 1, wherein the conductive layer includes Cu as a component.

6. (Original) The magnetic recording medium according to claim 1, wherein a portion of each of the fillers with which the holes are filled, the portion which contacts the conductive layer, has fcc structure and its (111) face is oriented in a direction perpendicular to the substrate.

7. (Original) The magnetic recording medium according to claim 6, wherein the portion touching the conductive layer includes Cu as a component.

8. (Original) The magnetic recording medium according to claim 6, wherein the portion touching the conductive layer includes NiFe as a component.

9. (Original) The magnetic recording medium according to claim 2, wherein the hard magnetic substance including Co includes at least one element among Cu, Cr, P, Ni, Pt, and Pd.

10. (Original) The magnetic recording medium according to claim 1, wherein materials from the conductive layer to the hard magnetic substance are given epitaxial growth.

11. (Original) The magnetic recording medium according to claim 1, wherein a soft magnetic substance layer is formed under the conductive layer.

12. (Original) The magnetic recording medium according to claim 1, wherein the holes are arranged in a honeycomb array.

13. (Original) The magnetic recording medium according to claim 1, wherein the holes are arranged in a rectangular array.

14. (Previously Presented) A magnetic record and reproduction apparatus comprising the magnetic recording medium according to claim 1.

15. (Original) A magnetic recording medium, in which an aluminum oxide layer having holes on a substrate is filled with a magnetic substance, comprising:  
at least one conductive layer between the aluminum oxide layer and the substrate,

wherein the conductive layer has fcc structure and its (001) face is oriented in a direction perpendicular to the substrate, and the magnetic substance includes a hard magnetic substance that has  $L1_0$  structure and the c-axes of which are oriented in the direction perpendicular to the substrate.

16. (Original) The magnetic recording medium according to claim 15, wherein the hard magnetic substance includes MPt (M = Co, Fe, Ni).

17. (Original) The magnetic recording medium according to claim 15, wherein the conductive layer includes any one among Pt, Pd, Cu, Ir, and Rh.

18. (Original) The magnetic recording medium according to claim 15, wherein a portion of each of the fillers with which the holes are filled, the portion which contacts the conductive layer, has fcc structure and its (001) face is oriented in a direction perpendicular to the substrate.

19. (Original) The magnetic recording medium according to claim 18, wherein the portion contacting the conductive layer includes any one among Pt, Pd, Cu, Ir, and Rh.

20. (Original) The magnetic recording medium according to claim 16, wherein the hard magnetic substance including MPt (M = Co, Fe, Ni) includes at least one element among Cu, Cr, P, Ag, and Pd.

21. (Original) The magnetic recording medium according to claim 16, wherein materials from the conductive layer to the hard magnetic substance including MPt (M = Co, Fe, Ni) are given epitaxial growth.

22. (Original) The magnetic recording medium according to claim 15, wherein an MgO (001) layer is formed under the conductive layer.

23. (Original) The magnetic recording medium according to claim 15, wherein a soft magnetic substance layer is formed under the conductive layer.

24. (Original) The magnetic recording medium according to claim 15, wherein the holes are arranged in a honeycomb array.

25. (Original) The magnetic recording medium according to claim 15, wherein the holes are arranged in a rectangular array.

26. (Previously Presented) A magnetic record and reproduction apparatus comprising the magnetic recording medium according to claim 15.

27. (Original) A magnetic recording medium, in which an aluminum oxide layer having holes on a substrate is filled with a magnetic substance, comprising:  
at least one conductive layer between the aluminum oxide layer and the substrate, wherein the conductive layer has any one of  $L1_0$ ,  $L1_1$ , and  $L1_2$  ordered structures, and its square array face is oriented in a direction perpendicular to the substrate, and the magnetic substance includes a hard magnetic substance that has the  $L1_0$  structure and the c-axes of which are oriented in the direction perpendicular to the substrate.

28. (Original) The magnetic recording medium according to claim 27, wherein the hard magnetic substance includes MPt (M = Co, Fe, Ni).

29. (Original) The magnetic recording medium according to claim 28, wherein the conductive layer has any one among L1<sub>0</sub> ordered structure including MPt (M = Co, Fe, Ni), L1<sub>1</sub> ordered structure including CuPt, and L1<sub>2</sub> ordered structure including CoPt<sub>3</sub>.

30. (Original) The magnetic recording medium according to claim 28, wherein the hard magnetic substance including MPt (M = Co, Fe, Ni) includes at least one element among Cu, Cr, P, Ag, and Pd.

31. (Original) The magnetic recording medium according to claim 28, wherein materials from the conductive layer to the hard magnetic substance including MPt (M = Co, Fe, Ni) are given epitaxial growth.

32. (Original) The magnetic recording medium according to claim 27, wherein an MgO (001) layer is formed under the conductive layer.

33. (Original) The magnetic recording medium according to claim 27, wherein a soft magnetic substance layer is formed under the conductive layer.

34. (Original) The magnetic recording medium according to claim 27, wherein the holes are arranged in a honeycomb array.

35. (Original) The magnetic recording medium according to claim 27, wherein the holes are arranged in a rectangular array.

36. (Previously Presented) A magnetic record and reproduction apparatus comprising the magnetic recording medium according to claim 27.

Claims 37. - 43. (Cancelled)

44. (New) The magnetic recording medium according to claim 1, wherein the conductive layer has fcc structure and its (111) face is oriented in a direction perpendicular to the substrate.

45. (New) The magnetic recording medium according to claim 1, wherein the layer is an aluminum oxide layer.--